

CLAIMS

What is claimed is:

1. An electronic circuit inspection sensor for inspecting a conductive pattern formed on an
5 electronic circuit, said electronic circuit inspection sensor comprising a plurality of sensor
elements each having a size less than the line width of the conductive pattern to be inspected,
said sensor elements being arranged adjacent to each other in a matrix arrangement so as to
allow the intensity of radiation emitted from said conductive pattern to be detected and to
allow the distribution of said radiation intensity to be detected in the form corresponding to the
10 shape of said conductive pattern.

2. The electronic circuit inspection sensor as defined in claim 1, wherein each of said sensor
elements has sides each length of which is about one third of the line width of said conductive
pattern.

3. The electronic circuit inspection sensor as defined in claim 1, wherein said sensor
elements in a matrix arrangement are disposed above said electronic circuit to entirely cover
said conductive pattern.

4. The electronic circuit inspection sensor as defined in claim 2, wherein said sensor
elements in a matrix arrangement are disposed above said electronic circuit to entirely cover
said conductive pattern.

5. The electronic circuit inspection sensor as defined in claim 1, wherein said sensor elements are positioned to said conductive pattern in a non-contact manner.

6. The electronic circuit inspection sensor as defined in claim 2, wherein said sensor elements are positioned to said conductive pattern in a non-contact manner.

7. The electronic circuit inspection sensor as defined in claim 3, wherein said sensor elements are positioned to said conductive pattern in a non-contact manner.

8. The electronic circuit inspection sensor as defined in claim 4, wherein said sensor elements are positioned to said conductive pattern in a non-contact manner.

9. An inspection system comprising:

inspection signal supply means for supplying an AC signal to selected one of conductive patterns formed on an electronic circuit to inspect said selected conductive pattern;

an electronic circuit inspection sensor including a plurality of sensor elements each having a size less than the line width of said conductive pattern, said sensor elements being arranged adjacent to each other in a matrix arrangement so as to allow the intensity of radiation emitted from said conductive pattern to be detected and to allow the distribution of said radiation intensity to be detected in the form corresponding to the shape of said conductive pattern;

pickup means for picking up individual radiation intensities detected by respective said sensor elements; and

recognition means for recognizing a specific region of said conductive pattern from which said radiation is emitted, in accordance with said radiation intensities picked up by said pickup means,

wherein said specific region recognized by said recognition means is compared to said
5 conductive pattern so as to allow a possible defect of said conductive pattern to be identified.